# Suicides Among BIA Boarding Schools in the Aberdeen Area. David McMahon, Class of 1990.

The indigenous people of North America experience many problems. Native Americans are often faced with poverty, poor health conditions, alcoholism, and a hopeless nature that largely stems from years of living in impoverished conditions. The stress of living with and among a dominant culture only compounds the problems as prejudice and contempt run rampant. An institution that to many Native Americans is the quintessence of the disruption of the Native American culture is the boarding school. For many years Indian children were sent to boarding schools to mainstream them into the dominant culture. The children were forbidden to speak their native tongue and they were forced to attend Christian churches, abandoning their Native religions. Waters refers to the schools as "government tools to break down Indian culture". I have heard stories about children having their mouths washed with soap because they spoke their Native language. Over time, the function of boarding schools has changed considerably. For example, in most South Dakota Indian boarding schools the Native language (Dakota, Lakota, or Nakota) that was once banished is now being taught to the children.

Boarding schools serve the Indian people in many ways. They are a place where Indian children have a chance to interact with others from their own cultural background. They often provide a last chance (or an extra chance) for Indian students who have had a hard time with education and public schools and for children who have had difficult home-lives and problems with the law. Problem children and teenagers are abundant in boarding schools, and they attend these schools for many reasons.

During the 1989-1990 school year, one boarding school in South Dakota experienced a cluster of suicide attempts that prompted this study. The basic hypothesis of this study is that if a group of problem students are put together in the same place (the boarding school), the result will be a significantly higher rate of some catastrophic event (namely, suicide behavior). The purpose of this study is two-fold: first, to compare rates of suicide behavior in three Native American boarding schools and determine reasons for any differences; second, to determine if there is a correlation between suicide behavior and several specific factors (such as personal and family history, school history, and personality traits).

## BACKGROUND

It has been well documented that injury mortality rates, including suicide rates, for Native Americans are remarkably higher than injury rates of the US overall. For example, the age-specific suicide mortality rate for the Aberdeen Area Indian Health Service (AAIHS) for 15 to 24 year olds from 1985 to 1987 is 57.3 deaths per 100,000 annually (102.3/100,000 for males and 11.9/100,000 for females). This rate is four times the suicide rate of 13.1 deaths per 100,000 annually for all races in the United States.<sup>3</sup> Suicide is also the fourth leading cause of years of potential life lost (before age 65) in the AAIHS with rate of 836.7 years of life lost per 100,000 population annually.<sup>4</sup> Suicide attempts accounted for 15 percent of the AAIHS Hospital inpatients in 1988. In a study at a large children's hospital, researchers found that about 0.25 percent of yearly admissions were for attempted suicide.<sup>5</sup> The incidence rate of suicide attempts resulting in hospitalization in AAIHS hospitals for the same year was 300 per 100,000 for all age groups; for the period 1981 to 1985, the rate of hospital admissions for suicide attempts for the age group 15 to 24 years was 695 per 100,000. That age group consistently had the highest rates for both suicide attempts and deaths.<sup>6</sup> Specific rates for suicide attempts are difficult to come by, mostly because attempts are not a reportable event in most areas. However, there are indications that AAIHS suicide-attempt rates are higher than the United States general population. In 1988, Cristoffel found the suicide attempt rate in an "affluent suburb" of Chicago to be approximately 140 attempts per 100,000 for 14-19 year olds.<sup>7</sup>

The importance of suicide attempts as precursory to suicide completions<sup>8</sup> provided the incentive for this project: "Communication of intent is the most significant and frequent danger signal of suicide, and the attempt may be such a communication". Generally, suicide attempts are not considered serious events; many professionals believe attempts are highly impulsive acts. However, there are those who disagree. A study by Teacher found suicide attempts to be "a deliberate decision reached only after all alternative solutions to their problems had failed." <sup>10</sup>

A literature search did not reveal any previous retrospective case/control studies on suicide behavior in Native American Boarding Schools. The author believes such a study is long overdue.

#### **METHODS**

Three Native American Bureau of Indian Affairs (BIA) or Tribal Contract boarding schools are included in the study. (A Tribal contract school has funding provided directly to the Tribe from the Federal government, bypassing the BIA.) The names of the schools and students are withheld for confidentiality. The smallest school has 75-125 boarders; the largest school has 300-400 boarding students. The schools take Indian students from all over the nation, with a majority of the students coming from South Dakota Tribes.

Permission for the study was obtained from the Aberdeen Area BIA, Office of Education, the superintendents of the schools, and, in one instance, the school board. Because of time constraints, and because most of the hospitalizations from suicide attempts in the AAIHS occur in the 15-24 year old age group, data was collected for grades 10-12 only. Data was collected for the past three years. The data sources are listed below:

- 1. School Intensive Residence Guidance (IRG) Files
- 2. School Administrative Records
- 3. Indian Health Service Hospital Records
- 4. Indian Health Service Mental Health Records
- 5. Ambulatory Patient Care Console Summary Reports

Data was initially collected from the IRG and school administrative records. The information was cross-referenced against the other data sources to catch as much data on suicide behavior, student demographics, family history, and school history as possible. We collected data on all types of suicide behavior which includes completed suicides, suicide attempts, suicide gestures, and suicide ideation. The terminology found in the record was used. If there was no descriptive term given for self-inflicted harm without death, it was designated an attempt. If the harm inflicted was very superficial, it was termed a "gesture". Durkheim defines suicide attempts as cases "resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result (death), but falling short of actual death." A gesture is considered to be less serious than an attempt. "Ideation" is simply having thoughts of suicide behavior. The IRG files were the main data source. Most valuable were the student histories, psychological reports, letters from home, dorm and staff notes, and student social summaries. The IRG program counsels students with problems ranging from alcohol abuse to pregnancy. It focuses on lifestyle changes and school activities. In two of the study schools, all the dorm students were in IRG. In the third school, students were assigned to the program at the request of parents, school officials, or, in some cases, students themselves. Data was analyzed using Epi Info Version 5.01.

# **RESULTS**

The study population included a total of 826 student records. 40 records were dropped because of insufficient data; thus, the final count was 786 students. 84 records had information on suicide behavior. 79 of these had sufficient data. Of those 79 suicide incidents, the 45 which occurred when the student was at school, are the focus of this study.

**Characteristics:** The study population contained slightly more females (53.3%) than males (46.7%). The student distribution at the 3 schools was 14.8%, 75.4%, and 9.8%, respectively. Most of the students came to the schools from a Reservation (79.6%). They are registered with 40 Tribal Agencies, with 68% coming from fifteen agencies. It is not possible to tell how many individual Tribes this includes because agencies often represent more than one tribe. The majority of the students are in the tenth grade (46%).

**Rates**: The suicide behavior rate for incidents occurring at the school is 5.72 incidents per 100 students. The rates can be divided into three separate categories: 1) all behaviors, 2) suicide attempts and gestures, and 3) suicide ideation. School C had significantly higher rates for overall suicide behaviors (p<.05) and suicide attempts/gestures (p<0.001).(Table 1) There was no significant difference among the suicide ideation rates for the three schools.

Table 1: Suicide events by school: Rates per 100 students

	All Behaviors	<u>Attempts</u>	<u>Ideation</u>
School A	4.3	0.9	3.5
School B	5.1	1.7	3.4
School C	13.0	9.1	3.9

**Risk factors:** Because it was often difficult to determine whether a suicidal incident was an attempt or a gesture, these behaviors were pooled for analysis. To begin, we will look at all suicide behaviors (attempts, gestures, and ideation) and then focus on suicide attempts/gestures. Females were 2.5 times more likely than males to have an incident of suicide behavior. The odds of suicide behavior for students whose parents are divorced or separated was nearly three times greater than students whose parents are not divorced. This variable is related to who the student

was raised by, i.e., the student's main parent figure. Students raised by an aunt or uncle, father only, or foster parents have significantly higher rates than students raised by their biological mother and father. Substance abuse includes students with alcohol, drug, and inhalant problems. More than half (54%) of the study population had a substance abuse problem. The odds of a student with this problem manifesting suicide behavior were 2.5 times higher than a student without a substance abuse problem.

14% of the study population were victims of child abuse at some time in their life. This includes sexual abuse, rape, physical abuse, and neglect. These children are nearly three and a half times more apt to have a suicide behavior incident than students who were not victims of child abuse. The final significant risk factor, history of past arrest, has an odds ratio of 0.42. This may indicate a protective effect, meaning that students who have been arrested have lesser odds of exhibiting suicide behavior than students who have not been arrested.

For suicide attempts, three risk factors were found to be statistically significant. First, the proportion of students placed in the school against their wishes who attempted suicide was significantly greater than the proportion of students who attempted suicide but were at the school because they wanted to be. Second, child abuse victims were 3.4 times more likely to attempt suicide than students without a history of child abuse. Third, females were three times more likely to attempt suicide than males.

Suicide behavior data: Inconsistent data limits the amount of analysis possible for suicide-behavior events. Most of the events were suicide ideation (60%). The attempt/gesture group made up the remainder of the events. There were 18 suicide attempts documented in the student records. The majority of the suicide-attempt methods were by laceration or ingestion. October and January had the most incidents. There was a steady increase from February to May. Less than 20% of the incidents involved alcohol. The average age of students with suicide behavior is 16. 35% of the suicide cases had at least one previous suicide attempt before coming to school. 6% of students demonstrated some form of suicide behavior before arriving at their current school.

#### **DISCUSSION**

This study had several limitations. The IRG records varied by school. Two of the schools' IRG files contained student histories and psychological reports for many students; the other school had neither of these important data sets. Also, counselors had different styles of record-keeping. If students dropped out early, their records were less complete. IHS medical records also showed differences in details about events. Researcher bias may have occurred because there were three researchers collecting data and we may have entered the data differently.

Schools having a large number of students from one Tribal agency may reflect the traits of their local populations. For example, the suicide attempt rate for the 2 American Indian populations near school C is higher than for the population near school A. Another bias to consider is differences in reporting incidents. The variation in rates may be caused by one school's reporting incidents more frequently than the others. There does seem to be some discrepancy in how the suicide behavior incidents are handled. School C is relatively close to an IHS hospital. That school may frequently use the hospital to care for suicidal students, whereas the other schools may have a tendency to handle more of the incidents at the school. Under-reporting is a definite possibility. (One would hope that all incidents are documented in the IRG files, regardless of how they are handled, but this may not be the case.)

Clustering is an important suicide phenomenon that was also examined. Clustering occurs when students mimic behavior of their peers. If there was a cluster of incidents at school C, it might have explained the school's higher rate. The distribution of suicide-behavior incidents over time does not indicate any clustering. Overall, females were more likely than males to have suicidal incidents, both in this and previous studies. Parental divorce or separation, has been found to be a significant risk factor in studies of non-Indian populations. Native American children are often raised in single-parent homes where the biological parents are divorced, separated, or never married. Even though it may be a social norm, the significant correlation of suicide behavior and parental loss through divorce or separation suggests that the psychological impact is still traumatic to these children.

The relationship of the parent figure or primary caretaker to the student is significantly related to suicide behavior. Those students raised by persons other than their biological mother and father were more likely to be attempters or ideators. While divorce is a contributing factor, it is not uncommon for children whose parents are not divorced to be raised by their grandparents. The groups of students raised by their aunt or uncle, fathers, or foster parents had higher rates of suicide behavior than the other parent-figure groups. This could be a spurious assumption. In the Native American nuclear family, the care of children is often shared by relatives. Dizmang found that Native American adolescents raised by more than one caretaker were more likely to commit suicide. <sup>16</sup>

Substance abuse is an important risk factor for suicide. In this study, the most commonly abused drug was alcohol. Many boarding schools have drug and alcohol counselors; this study reinforces the need for such counselors. It was not always possible to determine the severity of each student's abuse problem or whether or not it was a current problem. This could have caused over-reporting or under-reporting.

Perhaps the most important finding in this study is the strong association between child abuse and suicide behavior in Native Americans (p<.0001). Child abuse is probably under-reported in school records, so this association may be even stronger.

Students who had been arrested were less likely to exhibit suicide behavior than students who were never arrested. Many students are arrested for alcohol-related offenses. It is common for children to be court-ordered to alcohol counseling and treatment. This would explain the protective effect of arrests, and it also emphasizes the importance of the counselors and treatment centers. Being arrested may also have a sobering effect in young adolescents. It may force children and their guardians to examine and discuss the child's problems. All of these concepts could lessen a child's desire to attempt suicide. When dealing with small numbers, relationships may be spurious. For example, Dizmang found that Native American adolescent males with arrest records were more likely to complete suicide than males who had not been arrested.<sup>16</sup>

Students put in the school against their wishes were more likely to be suicide attempters than students who wanted to be in the school. Students are often court-ordered to the school or referred by social services. The reasons behind the court orders and referral are varied, but often it was because the student's parents were not capable of caring for the child. This risk factor is probably more related to student or family problems and less related to the school itself.

Suicide attempts and ideation events increase in October and January. These are months of adjustment for the students when stress is probably very high. The schools get a lot of new students in the second semester. The steady increase of events from February to December indicates that students may get more stressed toward the end of the year. Final grades may cause this stress. Also, counselors stated that a lot of students do not want to leave school at the end of the year. They don't want to face the realities of their lives at home.

## **CONCLUSION**

About 10% of South Dakota Native Americans attend boarding schools. The 3 schools in my study have a large number of problem students. How the student bodies compare to other schools in the state is not certain. There is no obvious reason why school C had a higher suicide behavior rate than other schools. The correlation between child abuse and suicide behavior may be the most important result of this study. In many cases, victims of child abuse are removed from their family (the abuser). They are then placed in foster homes or group homes. It is rare that they receive therapy. School counselors are reluctant to discuss child abuse because they do not have the expertise to provide therapy. Counseling for both child abuse and substance abuse is needed in the schools. This project was limited by time. I am sure I missed many incidents by not including the ninth graders. In the fall of 1990, a proposal was prepared by UCLA researcher Susan Sorenson, PhD, to the National Institute of Mental Health (NIMH) to expand this study to eight boarding schools.

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